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NOTES  
ON  
FEVER NURSING





# NOTES

ON

# FEVER NURSING 13

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NOTES

FEVER NURSING



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## INTRODUCTORY NOTE.

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THE following "Notes on Fever Nursing" are the outcome of instructions prepared for the use of the nurses at the City of Glasgow Fever Hospital, Belvidere.

The views on stimulation are those advocated by Professor Gairdner and acted on by Dr. Russell. What is urged is the *rational* and *strictly medicinal* employment of alcohol in the treatment of fever. Although addressed to hospital nurses, the instruction here offered is equally available for the treatment of cases in private.

J. W. A.

BELVIDERE, *August* 1879.



## CAUTION TO NURSES.

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NURSES are earnestly requested to bear in mind that they should on no account administer medicines on their own responsibility. The prescribing of drugs must be left entirely to the doctor. If nurses neglect this friendly warning, they place themselves in a false and dangerous position.

In the following Notes mention is made of the medicines which will probably be employed, and the objects of treatment, merely that the nurse may have an intelligent idea of what is being done, so that she may take interest in the discharge of her duties.

No encouragement is given to the nurse to encroach on the doctor's province, but it is hoped that the following hints may help to make her an intelligent and efficient assistant. It is, perhaps, unnecessary to add that, should a line of treatment be adopted different from that indicated here, the nurse should offer no comment. *It is her duty faithfully to carry out the instructions of the medical man under whose orders she is acting.*



## CHAPTER I.

### THE NURSE.

**Conduct.**—In her conduct a nurse should be bright and cheerful, yet thoroughly earnest. She must be patient and tender to the sick, and she must never be provoked into using violence. It must be admitted that some delirious patients are very provoking, and a nurse's temper is often severely tried ; but she should make it a rule never to lift her hand in anger to a patient. Neglect of this advice may place her in a humiliating—it may be a dangerous—position.

The helplessness of fever patients should be carefully borne in mind. The nurse must *think* and *act* for them. All the wants of nature, all the requirements of decency, will be neglected unless she interposes. Therefore the attendant on fever cases must be very thoughtful and vigilant in looking after the

comfort and well-being of the sufferers committed to her care.

A nurse should at all times maintain her self-respect, and so secure the respect of others. She should maintain perfect discipline in her ward, and strive to be on good terms with her fellow-nurses. It is very desirable that she should altogether avoid the use of stimulants. If she takes drink she may place herself and her patients in danger. Even the "smell of drink" may be enough to compromise her.

**Dress.**—A nurse's dress should be neat, clean, and plain—say a black dress, with white collar, apron, and cuffs. Strict personal cleanliness and neatness are very important. She should carefully wash her hands before touching food.

**Duty.**—A nurse on night duty is like a sentinel: many lives are committed to her care.

Sleeping on duty is not merely a disgrace, it is a crime. It is therefore a matter of necessity that a nurse who is on night duty should have proper rest and sleep during the day.

If a nurse feels ill she should at once "report," so that she may receive proper care and attention.



We cannot efficiently attend to the sick when we are ill ourselves.

The nurse must submit herself to the commands and discipline of the matron, but in all medical matters she must be entirely guided by the doctor. It is the nurse's duty to carry out the instructions which she receives from the medical officer.

It is also her duty to give the medical officer an accurate account of the cases, as to symptoms and the result of treatment.

Lastly, she must be very careful to inform the nurse who relieves her as to the condition and treatment of the patients during her term of duty, and to transmit orders.

## CHAPTER II.

### THE WARD (OR SICK-ROOM).

**Ventilation.**—*Ventilation* must be carefully attended to. It must be studied. Fresh air is essential in the treatment of fever. It is good for the patients, and prevents the concentration of the infectious agencies. Opening the windows is generally the most simple and efficient method of ventilation. A bit of fire in an open grate also contributes, but this is not available in hot weather.

Draughts of cold air must be guarded against.

**Temperature.**—The *temperature* of the ward must be carefully regulated. It should range from 55° to 60° Fahr.; it should not go over 60°. An overheated ward is very bad for the patients, and it makes the nurses very liable to catch cold on leaving it.<sup>1</sup>

**Lighting.**—The *lighting* of the sick-room must

<sup>1</sup> Sudden changes in the temperature are very dangerous.

be properly managed ; this is a great matter for the patients' comfort. Admit the sunshine, but protect the patient from a glare of light. Use as little gas-light as possible.

**Cleanliness.**—Strict *cleanliness* is absolutely essential, but the floor of a sick-room should not be washed oftener than necessary. The steam from the drying floor is bad.

Patients' motions should be thoroughly disinfected, and promptly removed. All scraps and remains of food should be carefully cleared away.

**Order.**—Order should reign in the ward. There should be a system, and it should be carried out. This will enable the nurse always to be abreast of her work.

**Inventory.**—The *Ward inventory* should be gone over from time to time (at fixed intervals) by both nurses, together. This will save much misunderstanding and irritation.

**Flowers, etc.**—Flowers, pictures, books, and toys should, if possible, be procured for the ward or sick-room. Toys are of great value in a children's ward. It should be carefully borne in mind that

books, toys, etc., may carry infection. Nothing should go from one ward to another, lest infection be spread in this way.

**The Bedstead.**—The *bedstead* should be of iron, of simple construction, and low. It should be well painted. Such a bedstead is easily disinfected by being washed with hot water and carbolic soap.

The bed must stand free; not in a corner. At the same time, it should, if possible, be out of a draught or the glare of a fire. Screens may be used to lessen these defects when they cannot be avoided.

Of course all curtains and hangings are utterly out of place in a fever bed. It would be folly of the worst description to treat a fever case in a “concealed” or box-bed. The patient would have a much better chance on a “shake down” on the floor,

**Mattress.**—The mattress should be of straw, flock, or wool. It is best to be of a porous nature, so as to permit urine to flow through it readily. The use of waterproofing to “save” the bed is a mistake. It keeps the patient in a muck of filth and moisture, and induces that which we are most anxious to avoid—namely, “bed-sore.” *Water* and *air* mat-

tresses are in some cases very valuable, especially in treatment of bed-sore. They should be covered with a pair of blankets. They require to be taken great care of, as they are very expensive and easily put out of order. The water bed should be filled with tepid water. The water should be changed occasionally.

**Bedclothes.**—The bedclothes will be regulated by the season of the year and the nature of the case. If patient perspires very much, the sheets should be removed and blankets substituted.

A “draw-sheet” should be employed when the patient soils the bed involuntarily; by this means he may be kept clean and dry, and bed-sore be avoided.

The “restraining sheet” is a stout canvas coverlet, provided with belts and buckles, used to keep wildly delirious patients in bed. In some cases it may be loosely applied, merely to prevent a restless patient lying naked, or tumbling out of bed.

The “jacket” is reserved for outrageous cases. The method of applying it will be discussed under Typhus.

Neither the "restraining sheet" nor the "jacket" should be employed unless absolutely necessary, and, even then, only with the full knowledge and approval of the doctor.

**Advantage of two Beds.**—Shifting a patient from one bed to another is an excellent plan. The change is most refreshing and grateful to the patient. He may have one bed by day and another at night. If nursing a case "in private," a nurse should strive to secure two beds for her patient.



## CHAPTER III.

### THE PATIENT.

#### GENERAL INSTRUCTION REGARDING METHODS OF OBSERVATION AND TREATMENT.

##### *Observation.*

**Note-Book.**—Nurse should keep a note-book in which to enter patient's pulse, temperature, the number and character of the stools, etc.

**History of Case.**—She should try to ascertain the "history" of the case, especially the "day of illness." That is an important point in a fever case.

**Careful Examination on Admission.**—The patient should be carefully examined on admission. The skin should be looked at for rash; and any marks of injury, desquamation (peeling off of the skin), blistering, deformity, etc., should be reported.

The possibility of a case becoming the subject of a medico-legal inquiry should not be overlooked. A

nurse should bear in mind that she may be called on to give evidence on these points in a law court. Therefore she should make careful observations, note, and report.

**Mental Condition.**—The patient's mental condition should be observed. Is he excited? stupid? raving?

**Temperature.**—What is the patient's temperature? Taking the temperature answers the question, Fever or no fever? It also helps us to answer the question, What fever?

Therefore the ascertaining of the temperature is a very important point in the observation of a case of suspected fever.

To attain this information we make use of an instrument called a "clinical thermometer." (See Fig. 1.)

**Thermometer.**—The thermometer consists of a glass tube, with a little vessel at one end filled with mercury. This vessel is called the "bulb" of the thermometer. When heat is applied the mercury rises in the tube. There is a scale marked on the outside of the tube by which the degree of heat can

be ascertained. We generally use Fahrenheit's scale in this country. (The name is usually contracted to *Fahr.* or F. when written after the degree.) For clinical purposes a *self-registering* thermometer is used—that is, one in which a portion of the mercurial column is separate from the rest, and remains fixed when the column falls back into the bulb. This separate portion is called the *index*. It points out the temperature, and remains stationary till shaken down again.

The scale is made up of degrees and their subdivisions.

The degrees are marked by strong lines. The space between two degrees is divided by four short light lines, each of which counts “two points.”

In reading the thermometer, therefore, you first mention the degree and then the number of “points” (if any) above the degree.

The diagram (Fig. 2) shows on one side how the temperature is noted, and on the other how it is read.

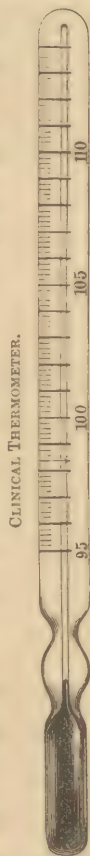


Fig. 1.

**Temperature.**—The normal (that is, the natural) temperature, taken in the armpit, is 98°·4 Fahr. It is marked on the scale by an arrow.

In taking temperature the following points must be attended to:—

It should first be seen that the *index* is below

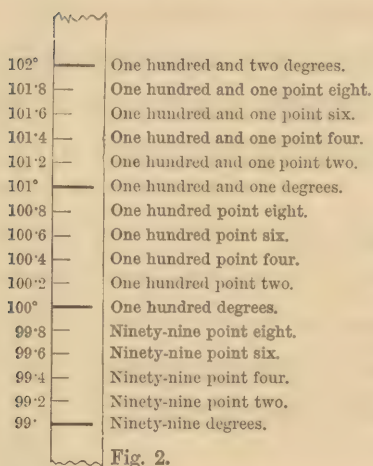


Fig. 2.

*normal*. If it is not it should be driven down by grasping the thermometer firmly in one hand, and then knocking the hands sharply together.

The *index* having been properly set, the next point

is to dry the patient's armpit. Then the bulb of the instrument should be put into the armpit, and the arm of that side folded across the chest, and the other arm folded over so that the hand may grasp and steady the arm that retains the thermometer.

The instrument should be retained in position for

at least ten minutes, then removed and the temperature read and noted.

The temperature should be taken at the same hour each morning and evening—say between 7 and 8 o'clock, morning and evening.

The temperature may also be taken by placing the bulb of the thermometer in the mouth; also by introducing it into the bowel. The last method is the best, but it is disagreeable—a shorter time is required, and the reading is higher.

*Cautions.*—Care should be taken that the thermometer does not slip from the fingers when the index is being knocked down. Care should be taken not to knock the index down into the bulb, for then the thermometer ceases to be a *self-registering* one.

Care should be taken that the thermometer is not left in the patient's armpit and forgotten. Thermometers are expensive, and a broken one may hurt a patient.

Particular attention should be paid to the taking of temperatures. Unless temperatures are carefully taken they are worse than useless—they are misleading.

**Head Symptoms.**—Head symptoms (headache, sleeplessness, delirium, stupor) must be noted.

**Throat.**—The throat must not be neglected. Pain in throat? Difficulty of swallowing?

**Chest Symptoms.**—Chest symptoms must be carefully observed. Any cough? spit? how does patient prefer to lie? The nurse should practise counting the number of respirations per minute. She should also pay attention to the character of the respiration—deep or shallow, regular or irregular, etc.

**Pulse.**—The nurse should acquire the art of counting the pulse; how many beats per minute? She should also notice the kind of pulse—hard or soft, full or small, regular or irregular.

**Tongue, Stomach, and Bowels.**—The state of the tongue, stomach, and bowels should be inquired into—Diarrhœa, constipation, flatulence, hæmorrhage, abdominal pain or tenderness.

**The Bladder, Urine.**—Is the patient passing water? Very important point. Quantity and appearance of urine passed.

(For examination of urine see Scarlet Fever.)



When the bladder is full of urine, but patient cannot pass any, that is called *retention of urine*.

When the patient passes no urine because the bladder is empty, no urine having been secreted, that is called *suppression of urine*.

In female patients, menstruation ("the monthly change"), pregnancy (being "in the family way"), and miscarriage (premature birth), demand attention. The state of the breasts must not be overlooked.

Bed-sore must be carefully looked for in all severe cases.

### *Treatment.*

**Bath, Sponging.**—When the patient is admitted, he should, if possible, be bathed in warm water. Most cases admitted into hospitals are badly in want of a bath. If patient is too weak to stand the fatigue of bathing, he should at once be put to bed, and his skin sponged with soap and warm water. Dilute Condyl's fluid, or carbolic acid lotion (1-40) may be employed if the state of the skin is very offensive.

**Shaving Head.**—If the hair contains vermin, it

should be shaved at once. If clean, instructions should be waited for. The shaving of the head is sometimes a very valuable part of treatment. (See Typhus.)

**Restoratives.**—If patient is cold and exhausted, hot blankets and hot bottles should be employed, and hot tea or toddy administered. If the case looks bad, the doctor should be called at once.

**Nourishment.**—During the illness the great object is to *nourish* the patient. Milk is the diet for fever patients.

**Relief of Thirst.**—Bitter and acid drinks may be given. If the thirst is very urgent, iced water.

**Stimulant.**—Alcoholic stimulant is given as a medicine not as a food. It should be given in small measured quantities, at regular intervals, like any other medicine. (The subject of stimulation in fever is referred to under Typhus.)

**Medicines.**—With regard to medicines, they should be administered in accordance with the directions on the label. The doses should be measured in a measure spoon or graduated glass, and timed by the clock. The effect of the medicine should be

carefully watched, and reported to the doctor at his visit.

**Reduction of Temperature.**—When patient's temperature goes high, attempts are made to reduce it by means of cold packs, cold baths, and the use of certain drugs, such as quinine. (This subject will be treated of under Enteric Fever.)

**Treatment of Head Symptoms.**—Head symptoms (headache, sleeplessness, delirium, stupor) require careful treatment. Evaporating lotion to head, sleeping draughts, etc. (See Typhus.)

**Treatment of Sore Throat.**—Sore throat demands the use of steam spray, gargles, etc. (See Scarlet Fever.)

**Treatment of Chest Symptoms.**—For chest symptoms (cough, difficulty of breathing, etc.) the doctor may prescribe cough mixture, and the use of poultices, mustard plasters—it may be, blisters.

**Cough Mixtures.**—Cough mixtures should be given only to the persons for whom they were prescribed. They frequently contain morphia, which is a dangerous drug for children.

**Mustard Plasters.**—A Mustard plaster should

be made from strong mustard with cold water. It should be left on from twenty minutes to an hour, according to effect. Mustard should be very cautiously used in children; danger of ugly sores forming. After the mustard is removed, cotton wool should be applied.

**Poultices.**—Poultices, to be effectual, should be properly made. The essential points in a poultice are heat and moisture. The material of which it is made is not of great moment. Linseed meal with hot water, and some oil added, is generally preferred. Should be made with boiling water, and well-worked, so as to form tough elastic mass. This should be evenly spread on thin muslin well oiled on the surface. The best form of poultice for the chest is the “jacket” poultice, which goes right round the body, and can be kept in position with tapes over the shoulders.

*N.B.*—A poultice should never be allowed to become cold on a patient. This is a gross neglect of duty.

**Blisters.**—Blisters may be raised by the use of the old-fashioned fly-blister, but it takes a long time

to act. Blistering tissues are more cleanly. Blistering fluid does the work quickly.

When the blister has risen it should be snipped and the fluid allowed to escape, then spermaceti ointment should be employed as a dressing. If it is desired to keep the sore open, savine ointment should be used.

**Change of Posture.**—The posture of patient should be altered from time to time. This will lessen the likelihood of the formation of bed-sore and passive congestion of back of lungs. The patient should not be permitted to lie on his back like a log.

**Relief of parched Mouth.**—Dry parched tongue, mouth, and throat may be much relieved by use of glycerine, ice, acid drinks, etc.

**Relief of Sickness and Vomiting.**—For sickness and vomiting the following may be tried:—Lime-water in milk, soda-water in milk, ice (champagne?), mustard plaster over stomach.

**Treatment of Diarrhœa.**—Diarrhœa, if mild, may be treated with lime-water in milk, or milk in which cinnamon has been boiled. If severe, recourse may be had to lead and opium pill, or starch and

opium injection into the bowel may be employed. The starch should be made thick, as if for laundry purposes—two table-spoonfuls will be sufficient in quantity. To this should be added from 15 to 30 drops of laudanum, according to the doctor's direction.

**Treatment of Constipation.**—Constipation will call for the use of purgatives or enemata. (An *enema* means an injection.) Purgatives should not be given in enteric fever, only enemata. (See Enteric.)

Castor oil is generally the best purgative to administer.

**Treatment of Flatulence.**—Flatulence demands the use of peppermint water, etc. (See Enteric.)

(For treatment of intestinal hæmorrhage, perforation of the bowel, and abdominal pains, see Enteric Fever.)

**Treatment of Retention of Urine.**—Retention of urine must be attended to. First a hot fomentation to the lower part of the belly, and a large injection of warm water into the bowel should be tried. If these means fail, resort must be had to the use of the *catheter*, which is a tube for removing the

urine from the bladder. Every nurse should be able to use the female catheter—it is an important part of her duty.

**Treatment of Suppression of Urine.**—In suppression of urine a hot poultice may be put over the kidneys, and a little gin be given. Cupping, wet or dry, might be practised. (See Scarlet Fever.) It is of great importance to distinguish between *retention* and *suppression* of urine.

The treatment suited for suppression would be decidedly injurious in retention—it would make matters worse. Of course the nurse should be guided by the doctor in the treatment of such cases; but it is well that she should be aware of the facts now stated.

**Treatment of Menstruation.**—If a woman menstruates during an attack of fever, extra care must be taken of her. Cleanliness, comfort, warmth, must be secured.

**Treatment of Miscarriage.**—Pregnancy demands watchfulness on the part of the nurse. Abortion or miscarriage is apt to occur during an attack of fever. This is a serious matter for the patient.



Therefore, if complaint is made of "bearing down" pains, or suspicious pains, or if there is the slightest appearance of blood, or blood-tinged mucus, it is the nurse's duty at once to call the medical attendant, so that preventive measures may be taken. These will consist in the maintenance of the greatest possible rest and quiet, the administration of opium and cold food and drink, etc. etc. If, in spite of these efforts, miscarriage should take place, the treatment will be like that of an ordinary labour. When the "after-birth" has been removed a pad should be placed over the abdomen, and a broad bandage be firmly applied round the body. The patient should be directed to pass water on her knees, so as to facilitate the removal of clots, etc. If the usual discharge does not set in, hot fomentations should be applied, and injections of warm water resorted to. If the discharge ceases abruptly or too soon, this should be reported to the doctor. If the breasts are distended with milk or painful, belladonna liniment should be rubbed on them. This gives relief. It should be remembered that the belladonna is poison. A baby should not be put to a breast which has been rubbed with this poisonous liniment.



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In abortion (which may be called miscarriage at an early stage) all the clots, etc., that come from the patient should be kept for doctor's inspection.

**Treatment of Bed-sore.**—The formation of “bed-sore” is best prevented by keeping the patient clean and dry, changing his position frequently, and using camphorated spirit to harden the skin. If it does form, the sore should be dressed with lint soaked in camphorated oil, and the patient placed on a water-bed. (See Enteric.)

## CHAPTER IV.

### TYPHUS FEVER.

**How the Disease is spread.**—Typhus fever is a disease which lingers in our midst. It is an infectious disease, conveyed from the sick to the healthy by the atmosphere. The *contagion* may be carried in clothing, etc. The spread of the disease is fostered by filth, destitution, and over-crowding. Fresh air and cleanliness are the best antidotes to typhus-fever poison. Those who have had an attack of typhus do not take the disease again. Cases are mentioned where a second attack is said to have occurred, but these are so very rare as not to affect the truth of the statement now made.

**Sketch of Typhus.**—The following train of symptoms characterises an attack of typhus fever:—

Shivering, headache, pains, vomiting, loss of appetite, great thirst, loss of strength, bloodshot eyes, foul tongue, increased rate of pulse, rise of tempera-

ture, frequent cough (patient may regard his illness as a "bad cold"), head symptoms severe; in early stage headache, in latter stage delirium.

On fifth or sixth day rash begins to appear. The spots are seen on the body, limbs, and even face in some cases. They are commonly seen on the hands and feet, in this respect differing from enteric spots, which are rarely seen on the hands or feet. The typhus spots, red in colour, at first disappear on pressure; as they get older they become darker, and cease to disappear on pressure. The typhus spots tend to shade away, and also to run into each other, thus giving a blurred character to the rash. Besides the spots there is mottling of the skin. The first fresh spots of typhus might be mistaken for enteric spots.

About the fourteenth day the patient gets the "turn." Sometimes the disease runs a longer course. After the "turn" a change for the better is evident; the tongue, which was brown and crusty, moistens and cleans, the pulse and temperature fall. The appetite returns; it soon becomes keen. Convalescence is generally rapid. Plenty of food and sleep are all that the typhus convalescent requires.

If the case takes an unfavourable course, there is found to be failing pulse, rapid heavy breathing, skin clammy, extremities cold, pupils contracted, patient falls into a state of stupor from which he cannot be roused. Convulsions may occur. The skin gets colder and more clammy, the pulse becomes a trembling thread, there is a rattling in the chest, the breathing ceases.

**Shaving the Head.**—The treatment of a case on admission has already been briefly referred to in Chapter III.

With regard to the question of shaving the head, however, the following remarks may be made:—In adults the head should not be shaved without due consideration. Especially in women some prudence must be exercised, on account of the disfigurement and the consequent difficulty of procuring work and lodging on leaving hospital.

But if the hair is filthy, or head symptoms bad, there must be no hesitation in sacrificing the hair. It is well sometimes to delay shaving the head in very severe cases, as great good may be got from it at an advanced and more critical stage. Sound sleep frequently follows shaving of the head.

**Nourishment.**—Too much stress cannot be laid on the importance of getting the patient to take plenty of nourishment; such as milk, beef-tea, or chicken soup. But, above all, every effort should be made to get him to take plenty of milk. Milk is the diet for a fever patient. If the patient is very thirsty and drinks a great deal of milk, it should be diluted with water, otherwise his stomach will get upset.

If a typhus patient is inclined to take a little porridge and milk, or tea and toast, his wish should be gratified. It is a good sign. Of course no heavy article of diet should, on any consideration, be given. Sometimes a patient is whimsical and obstinate; refusing a drink from one person, taking it from another; refusing it at one time, taking it at another. This must be carefully studied. The patient should be humoured, coaxed, pressed, even in some cases forced to take his milk. A little *tact* is invaluable in managing a troublesome case.

If patient refuses to drink he may be fed by a tube passed through his nose. He may also be nourished by injections of beef-tea, chicken soup, etc.

**Stimulant.**—In typhus, one of the great dangers is failure of the heart's action. Hence the judicious administration of alcoholic stimulant is one of the most important parts in the treatment of a case of typhus. The condition of the pulse is the chief guide in the administration of the stimulant. Many cases of typhus (in young healthy subjects) get no stimulant, because they do not require it.

It must not be fancied that every case of typhus requires alcohol merely because it is typhus.

The kind of stimulant, and the quantity to be given in twenty-four hours, is determined by the physician. He prescribes it like any other medicine. Four, six, or eight ounces of wine, whisky, or brandy, may be ordered in the twenty-four hours, to be given in regular doses, according to direction. Six ounces will give a table-spoonful dose every two hours.

The quantity prescribed will be regulated by the results. Each case must stand on its own merits.

If the stimulant flushes and excites the patient, its use should at once be abandoned.

It must be remembered that we do not give alcohol as a luxury or as a food. We give it as a

*medicine*, in regulated doses, and we watch the effect. We are not satisfied unless the patient takes his milk as well as his wine. The nurse should make sure that the stimulant is not allowed to run on after it has ceased to be necessary. So soon as the use of the alcohol can be dispensed with it is left off entirely.

When the heart's action is failing, hot poultice with mustard may be applied.

**Medicines.**—It is usual to give an “acid mixture” in treating typhus. This consists usually of a mineral acid and a vegetable bitter. Dilute sulphuric acid and tincture of orange do very well.

Castor oil may be employed to move the bowels, and a chloral draught to procure sleep.

Head symptoms constitute a prominent feature in typhus fever.

There is violent headache during the first week, but it subsides and delirium sets in. Sleeplessness, real or fancied, may trouble the patient.

**Treatment of Headache.**—Headache demands trial of head lotion (vinegar and water, whisky and water, ether, rectified spirit and water, iced water, etc.) A piece of lint or linen soaked in one of these



fluids should be applied to the shaven scalp. Shaving the head, application of pads over temples and bandage round the head, ice-bag to head, ice rubbed slowly and gently over the shaven scalp, cold affusion. (Cold affusion is effected by holding patient's head over a basin and pouring cold water from a height on the back of the head. In typhus it frequently gives decided relief, and is liked by the patient.) Mustard plaster to back of neck; hot fomentation to scalp.

**Treatment of Sleeplessness.**—For sleeplessness, in addition to the above, the physician may direct,—sponging body and limbs with warm water and vinegar; lowering or excluding light; quiet; glass of toddy or negus; draught of porter or beer; hop pillow; sleeping draught.

**Sleeping Draughts — Caution.** — (*N.B. — A nurse should never give a sleeping draught or other drug unless it is expressly prescribed by the medical man in charge of the case.*)

The eyelids of a sleepless patient should be closed from time to time to prevent the eyes getting dried.

A typhus patient will frequently insist stoutly



that he has been getting no sleep when the contrary is well known to be the truth.

**Treatment of Delirium.**—The delirium in typhus is usually of the muttering kind. Patient lies talking to his (absent) friends, or his horse; often fancies himself at work, or wishes, nay insists on going to his work; leaves his bed and wanders about, but can be induced to lie down again. He must be closely watched, or he will find his way outside and may come to grief. The nurse must be ever vigilant. As a rule no restraint will be required beyond that of firm, good-natured remonstrance.

**Mechanical Restraint.**—If, however, the delirium should assume the violent and dangerous form, it may be necessary to resort to mechanical restraint. This should never be employed unless actually necessary, but when it is employed it should be thoroughly and effectually carried out.

**Mechanical Restraint in Delirium.**—Half measures in the matter of mechanical restraint are very bad. They excite and irritate the patient. If he is to be restrained at all, he must be so effectually restrained that he feels no temptation to struggle.

The means employed for securing the patient are the "sheet" and "jacket," to which reference has already been made.

**The "Jacket."**—The "jacket" is a strong canvas tunic or shirt, with long sleeves. It is put on pinafore fashion, and tied with tapes at the back. The long sleeves are drawn down over the hands, and a broad bandage is then applied round the wrists, to prevent the arms being pulled up out of the sleeves. This is an important point; for when the patient can draw his arms out of the sleeves he will soon be free.

After the jacket is on, the patient is laid down, his arms are then crossed, and the hands tied towards opposite sides of the bed by means of long tapes which are attached to the ends of the sleeves.

The next point is to prevent him pulling up his knees. This is best done by securing his feet with a folded sheet tied round the ankles, and the ends secured to the sides of the bedstead.

**The "Restraining Sheet."**—Then the bed-clothes are laid on him, and over all is placed the restraining sheet, which is fastened to the bedstead by means of straps and buckles.

The great points are (1) to prevent the patient drawing his arms out of the sleeves of the jacket ; and (2) to prevent him drawing his knees up. Unless these points are made sure, the patient is not secure.

The following are the rules for the employment of mechanical restraint :—

(1.) It must not be resorted to unless absolutely necessary.

(2.) The patient must be relieved from it as soon as this can be done with safety.

(3.) When under it, great care must be taken to make sure that the patient is not hurt by any tight ligature, and free play must be left for the breathing.

(4.) This method must never be employed without the knowledge and expressed approval of the physician in charge of the case.

The nurse is earnestly warned not to lose temper with a delirious patient. It must be remembered that he is, for the time, insane and suffering.

Cold baths, cold packs, and the use of sedative medicines may be prescribed by the physician in cases of violent delirium.

**Necessity for Vigilance.**—Delirious patients must be very constantly and carefully watched.

A nurse should never be thrown off her guard. Delirious patients are often very cunning, and may display sudden and dangerous violence. If the nurse is easy and negligent, the first warning may be the patient crashing through a window.

The expression of the patient's face should be studied—especially the eye. A little careful observation and experience will enable a nurse to anticipate danger.

**Treatment of Stupor.**—For stupor the following may be tried:—Strong green tea, strong coffee, sponging with hot whisky, mustard plasters. (With care—remember the patient is insensible.)

For convulsions, hot poultice may be applied over the kidneys, and a brisk purgative administered.

**Treatment of Chest Symptoms.**—For chest symptoms—cough mixture, poulticing the chest, and frequent turning of patient. If patient is allowed to lie on his back like a log, there is danger of congestion of backs of lungs.

The management of sickness, vomiting, thirst,

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constipation, passing of water, and miscarriage, have already been discussed.

**Treatment of Hiccup.**—Hiccup is a bad sign in typhus. Camphor water, spirits of chloroform, and musk, may be tried.

The great object in nursing typhus fever is to keep up the patient's strength till the disease has run its course.

## CHAPTER V.

### ENTERIC FEVER.

ALSO CALLED TYPHOID FEVER AND GASTRIC FEVER.

**How the Disease is spread.**—This disease is communicated by the sick to the healthy by means of drinking water which has been tainted by the excreta of the former. It is also conveyed by milk which has become contaminated by the enteric contagium, probably through tainted water.

**Sketch of Enteric Fever.**—The commencement of an attack of enteric fever is generally insidious. Patient is languid; feels wretched; does not know what is the matter with him. May fight against the disease for a time, but is at length compelled to yield. He has shiverings; appetite fails; he droops; is obliged to go to bed. Tongue moist, coated with yellowish or whitish fur; bowels loose, motions like pea-soup; pain in the abdomen. Pulse

and temperature go up ; flush on one or both cheeks ; eyes clear and bright, pupils dilated. Patient talks sensibly and seems intelligent, as a rule ; but there may be delirium—violent delirium.

The *rose-spots*, which are characteristic of the disease, may come out about the seventh day—frequently at a later date. These spots come out in successive crops—usually a few at a time. As one set fades another comes out. The spots are affected by pressure throughout their existence. They do not become fixed like typhus spots ; they disappear on pressure. They are of a bright red or rose colour, and they are raised to the touch. Unlike the typhus spots, they are very seldom seen on the hands and feet.

Bleeding from the nose is rather common.

As the disease advances, the patient gets very weak and emaciated, and there is great danger of bed-sore forming. The evening temperature keeps higher than the morning temperature—this is one of the characteristics of the disease. There may be profuse diarrhoea, numerous loose yellow motions. On the other hand there may be constipation.

In enteric fever there is ulceration of the bowels,



which may give rise to intestinal hæmorrhage. The ulcers may eat through the bowels and give rise to "perforation," which is generally indicated by vomiting and violent abdominal pains.

The tongue becomes bare, red, dry, fissured.

There may be retention of urine, or it may be passed in bed.

Teasing cough is not infrequent, and inflammation of the lungs (pneumonia) may arise to complicate the case.

The course of the disease is, as a rule, twenty-one days, but it may be longer.

When recovery takes place the improvement is gradual, not a sudden "turn" as in typhus. The temperature comes down—that is one of the most trustworthy signs of convalescence; the use of the thermometer is indispensable. The tongue and pulse improve. There is usually keen appetite, which must *not* be gratified.

After all the patient may "relapse," that is, go back into the disease: the temperature rises again, the diarrhœa returns, and so may the rose spots.



Swollen leg, erysipelas (rose), and consumption may follow an attack of enteric fever.

*Treatment.*—Bathing, sponging, shaving head, treatment of head symptoms have already been discussed.

**Delirium.**—Delirium is not so common in enteric as in typhus, but when it does occur it may prove very violent. The worst cases of delirium are those with chest complication. A nurse should always be on her guard with such cases. Her vigilance should never relax. Sudden violence may occur. When the physician cautions a nurse regarding such a case, she must be particularly attentive even although there does not seem to be much ground for the doctor's apprehension. He is the judge of that matter; and, if his warning is slighted, the result may be very awkward for the patient and nurse.

**Treatment of Bleeding at Nose.**—Bleeding at the nose may require treatment. Cold lotion to forehead, elevation of head and chest, cold substance at back of neck, holding up the hands, may be tried. If these means fail, call the doctor at once.

**Nourishment—Careful Restriction of Diet.**

—As regards the patient's nourishment, there must not be any liberty permitted in the way of diet. Nothing but milk and beef-tea should be given while the fever lasts. Even in convalescence very great prudence is necessary. In this respect the disease offers a marked contrast to typhus.

One of the most important duties of a nurse in charge of enteric fever is to make sure that her patient gets nothing but milk diet during the acute stage of the disease. He may crave eagerly and persistently for solid food, but the nurse must be firm and unflinching in the discharge of her duty.

It must be remembered that the bowels are diseased in enteric fever; they are ulcerated and liable to bleeding and perforation.

**Regulation of Diet in Convalescence.**—In convalescence the diet must be carefully regulated by doctor's orders. Nothing but milk and beef-tea should be given till the patient's temperature has been normal for several evenings. The *evening* temperature is the guide. Then a little arrowroot or cornflour may be allowed, then chicken soup,

bread and milk, rice and milk, beef-tea and bread, an egg, tea and toast, some chicken or *fresh* fish, a morsel of roast or steak, beer, porter, etc.—going on gradually and cautiously.

**Danger of Indiscretion.**—It must be constantly borne in mind that indiscretion in diet may cost an enteric patient his life, and involve the nurse in serious trouble.

**Treatment of high Temperature.**—Cold or tepid sponging is very soothing to the patient when the skin is hot. If the temperature runs high we may resort to the use of certain drugs, such as quinine and salicine, which have the power of lowering the temperature. Cold packs and baths may be employed. Cold baths are very extensively used in Germany in the treatment of enteric fever. The results are said to be wonderfully good.

To carry out the cold bath treatment it is necessary to have a large portable bath which can be brought to the bedside, and plenty of strong skilful hands must be available. The patient may be put into water of a comfortable temperature and then cold water gradually added. When it is judged

that the immersion has lasted long enough, the patient should be put back in bed among warm blankets.

The cold bath lowers the temperature, but it soon rises again. The bath is repeated again and again.

This treatment requires the personal supervision of a medical man.

**Treatment of Flatulent Distension.**—For flatulent distension of the bowels the following may be ordered by the doctor:—peppermint water, turpentine in milk (say in ten-drop doses), acetate of lead, injection containing assafoetida or turpentine. In some cases a long tube is passed into the bowel by the doctor, with the object of permitting the escape of the gas which causes the patient so much suffering and distress. It should be remembered that the administration of turpentine may cause difficulty in passing water.

**Treatment of Diarrhœa.**—Diarrhœa in enteric is common. If the motions do not exceed three in the twenty-four hours, it is probable that no treatment will be adopted. If troublesome, lime-water and milk, or milk in which cinnamon has been

boiled, may be tried. If these fail, the physician will prescribe treatment; perhaps lead and opium pill, or starch and laudanum injection.

**Treatment of Constipation.**—If constipation troubles the patient, no purgative should be administered. The ulcerated condition of the bowels, and the danger of hæmorrhage and perforation, must be remembered. In such a case the bowels should be moved by a large enema of warm water and soap. This is a disagreeable, but safe and effectual method. The object is not to purge the patient, but merely to move the bowels. An enema will do this.

**Treatment of Intestinal Hæmorrhage.**—Hæmorrhage from the bowel must be watched for, and the slightest appearance of blood in the motions should be promptly reported.

Extensive bleeding may take place in the bowel without appearing externally. The patient's blanched appearance will raise suspicion. For intestinal hæmorrhage the following treatment may be prescribed :—

Cold water cloths to belly, ice to swallow, ice introduced into bowel.

Drugs—Ergot, acetate of lead, lead and opium, turpentine.

**Treatment of Perforation.**—Sickness and vomiting in the advanced stage of enteric fever, if conjoined with abdominal pain, may be taken as indications of perforation of the bowel. As a rule intestinal perforation means death. An enteric patient in an advanced stage of the disease should not be allowed to get up to stool, but be made to use the bed-pan.

Abdominal pain and vomiting should be promptly reported.

If perforation does occur, opium will probably be freely prescribed and the use of ice, with very small quantities of milk and beef-tea. If there is distension of the belly and great pain, a poultice with laudanum added may be employed, or hot fomentations with turpentine.

**Fomentations.**—Fomentations, to be effectual must be employed hot—a fresh one ready for application before the old one is taken off.

Two woollen cloths should be provided, a towel, and a kettle of hot water. One of the flannels

should be placed in the centre of the towel, and hot water poured over it. The towel should then be folded so as to inclose the flannel. By taking the ends of the towel, one in each hand, the fomentation can be wrung out without scalding one's hands.

The fomentation should be applied as hot as the patient can bear it. The fomentation should be covered with waterproofing while on. It should be renewed say every five minutes till relief is experienced.

The fomentation may be sprinkled with turpentine, or moistened with laudanum, according to circumstances.

**Treatment of Bed-sore.**—Bed-sore requires particular attention in enteric fever. It is very apt to form in severe cases of this disease, owing to the length of illness, patient's emaciation, great weakness, and passing in bed. If it does form it adds greatly to the patient's misery. It entails great suffering on the poor patient, and a disagreeable task on the nurse. The dressing of an extensive bed-sore is a very nasty affair.

The great object is to prevent, if possible, the



formation of bed-sore. The means to that end are—strict, scrupulous cleanliness. The patient must be kept dry, the position frequently changed to prevent pressure of the weak skin over bony prominences. Wherever there is a blush of red, camphorated spirit or brandy should be thoroughly and repeatedly applied to harden the skin. The following may also be employed:—painting skin with collodion, with solution of gutta percha in chloroform, adhesive plaster, ring of cotton wadding, water cushion. The water cushion is a troublesome thing; it is apt to hurt the patient. But, if bed-sore threatens in spite of the precautions now mentioned, it would be well to have patient promptly removed to a water or air bed.

Should bed-sore form after all, it should be dressed with lint soaked in camphorated or carbolic oil, and the nutrition of the patient should receive careful attention.

If very tedious in healing, various stimulating or soothing lotions may be employed, and the doctor may prescribe tonics.

The administration of stimulant, treatment of head symptoms, retention of urine, miscarriage, etc., have already been discussed.



## CHAPTER VI.

### SCARLET FEVER.

(ALSO CALLED SCARLATINA.)

**How the Disease spreads.** — An infectious disease. The infection may be carried by clothes. The infection is strong while the patient is undergoing the process of “skinning.” The disease is frequently contracted by children at school. One convalescent returning to school or workshop before the process of “skinning” is complete may cause a little epidemic. The contagium may be carried by milk. Instances are met with of second attacks from the disease, but as a rule persons take it once only.

**Sketch of Scarlet Fever.** — The person attacked has shivering, vomiting, sore throat. Sometimes in children the disease is ushered in by convulsions. On the second day the rash appears. It is a bright scarlet rash seen on the body and limbs.

The tonsils are enlarged and painful. There is

pain on swallowing; and if the tonsils are greatly enlarged, when an attempt is made to swallow fluid it may come back through the nose. This fever sometimes assumes a very severe form—temperature may go very high, and the delirium be very strongly marked. Running at the nose is an unfavourable sign.

The tongue is at first covered by a thick white fur, through which red papillæ project. By and by the fur cleans off, and leaves a red tongue presenting an appearance which has been compared to that of a strawberry. When the fever subsides, the skin begins to come off. This is called *desquamation*. The skin peels off the hands and feet. An attack of scarlet fever may be complicated with chest symptoms, and may be followed by suppuration of the glands of the neck, suppuration of the ears, convulsions, dropsy, rheumatism.

*N.B.*—Scarlet fever is particularly dangerous to women in childbirth—very often fatal. Therefore those who are about to be confined should be removed from the influence of the disease.

*Treatment.*—Hot bath, and sponging with vinegar

and hot water, are beneficial. Great care must be taken that patient does not get a chill after a hot bath. In children the head should be shaved at once; this relieves the headache and conduces to comfort.

The patient should get plenty of milk. Stimulant is required only in exceptional cases.

In this hospital (Belvidere) a mixture containing tincture of the muriate of iron and chlorate of potash is given to the patients.

**Treatment of high Temperature and Delirium.**—In cases where there are high temperature and severe head symptoms a cold pack is a capital thing.

**Cold Pack.**—The patient should be stripped naked and wrapped in a sheet<sup>1</sup> which has been wrung out of cold water. A dry sheet should be swathed over this, then the patient laid in bed and covered with blankets. He should remain in the pack for an hour or so.

After coming out of the pack the patient should be rubbed with hot towels beneath the bed-clothes, and clothed in warm flannels as quickly as possible. Great care is required to prevent any exposure.

<sup>1</sup> Or blanket.

The sedative effect of this application is very marked. The delirium and suffering are subdued, and very probably the patient falls into a refreshing sleep.

The remedies for head symptoms described under Typhus may be employed in scarlet fever.

**Treatment of Sore Throat.**—If the throat is bad the “steam spray” should be used. This is a capital method; it is of great service in the treatment of the sore throat of scarlet fever; it should never be omitted when the sore throat is severe. The following diagram (Fig. 3) and explanation will show the construction and mode of working the steam spray:—

We use (in Belvidere) a little tin apparatus of this description, bearing the name, “Dr. Siegle’s Patent.”

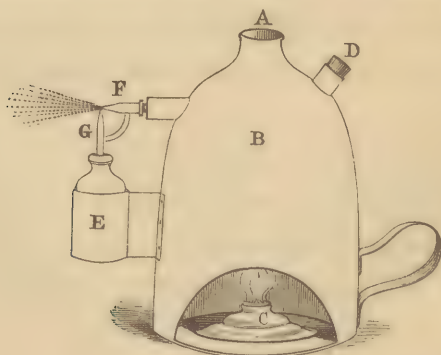


Fig. 3.

Water is poured into the boiler B by means of the tube D, which is then closed by a cork. The spirit-lamp C is lit and placed beneath. A is the vent. Simple water, tincture of steel, or other medicated solution, is put into the bottle E. When steam is up it issues from fine glass tube F, and rushing over the mouth of fine glass tube G it sucks up the contents of bottle E, and drives them forth in the form of fine spray.

There is a little difficulty at first in getting children to submit to the use of the spray, as they are frightened, but when they have experienced the benefit once they take it readily again. The patient opens his mouth as widely as he can, and the spray is then directed to the back of the throat. Tincture of steel, solution of bromide of potassium, etc., may be applied in this way, or simple water spray may be preferred.

Gargles may also be employed for the relief of sore throat. Young children cannot use gargles. Various substances may be applied to the throat by the doctor. Poultices to the throat, and rubbing with hot camphorated oil, may be tried.

**Chest Symptoms.**—Chest symptoms in scarlet fever should be promptly attended to ; jacket poultice should be at once applied. Pain in the chest, cough, or hurried breathing, should be reported at once.

**Dropsy.**—Dropsy is one of the evils to be feared in connection with scarlet fever. It is caused by the kidneys not acting properly.

Pain in the back, vomiting, scanty and high-coloured urine, with puffiness about the eyes, are clear warnings that the kidneys are not doing their duty.

It should be explained that, in health, the skin and kidneys to a certain extent act for each other. Now, during an attack of scarlet fever, the action of the skin is seriously interfered with, and extra work is thus thrown on the kidneys. If, during desquamation, the skin is chilled by imprudent exposure to cold, the kidneys become congested and cease to do their work efficiently, and we have as the consequence albuminuria, dropsy, convulsions.

It will thus be seen that great care should be taken to keep the skin warm in scarlet fever ; flannels are indispensable.

**Albuminuria.**—Albuminuria is the term applied when the urine contains albumen; the same substance as white of egg. It is passed from the blood into the urine when the kidneys become congested.

**Examination of Urine.**—As the observation of the urine is one of the most important points to be attended to in a case of scarlet fever, the nurse's duty in the matter should be explained:—

(1.) The quantity of urine passed in the twenty-four hours should be measured.

(2.) A portion of it should be kept in a "urine glass" (Fig. 4) for examination by the doctor. Patient's name should be attached, and a paper cover applied, to exclude dust from the urine.

(3.) Everything should be ready for the doctor's use when he wishes to test the urine. The necessary articles are:—

Test tubes (Fig. 5). These are glass tubes, closed at one end, used for boiling the urine. They should be kept *scrupulously clean*. They are usually arranged on a little rack. Strong



Fig. 4.



Fig. 5.



nitric acid in a stoppered bottle. This is *poison*, and should be carefully kept out of the way. The "Spirit Lamp" (Fig. 6), which is a glass vessel containing methylated spirit, and furnished with a wick and extinguisher.



Fig. 6.

When the doctor wishes to find if the suspected urine is albuminous, he pours some from the urine glass into a *clean* test tube, and adds a drop or two of strong nitric acid. If a white cloud or milkiness is produced by the addition, the suspicion of the presence of albumen is increased.

The test tube is then held over the flame of the spirit lamp till the urine boils. If the heat clears up the urine, it is not albuminous after all. But if it becomes flaky like thick beef-tea, or coagulates into a solid mass, we are certain that it is albuminous, and this shows that the kidneys are affected.

**Diet.**—Rich heavy foods should be avoided, as they throw work on the overtasked and irritable kidney.



Diet in early convalescence should be light—milk, oatmeal porridge and milk, rice and milk, arrowroot, tea and toast. Afterwards—egg, chicken soup, chicken and fish, etc.

**Early Indications of Dropsy.**—If dropsy should occur, it will be early seen in the puffiness of the face, and the swelling on backs of hands and feet, where “pitting” will follow firm pressure with the finger.

**Treatment of Dropsy.**—The object in treating dropsy is to relieve the kidneys as much as possible. Therefore the skin and bowels should be strongly acted on,—the former by means of hot packs, hot poultices (over the loins), and cupping; the latter by brisk purgatives, such as compound jalap powder, followed by free use of cream of tartar drink.

The doctor may also prescribe various drugs.

Increased quantity of urine and diminution in amount of albumen are signs of improvement.

**Treatment of Convulsions.**—The treatment for convulsions is hot mustard bath, a purge, and perhaps cupping over the loins.

**Dry Cupping.**—*Dry cupping* is performed as

follows:—Glass vessels somewhat like bed-room tumblers, and called “cupping glasses,” are provided, also a spirit lamp with a large flame. The skin having been well reddened by hot fomentations, a cupping glass, which has been dipped in hot water, is taken in hand, and the flame of the spirit lamp is thrust into it for a little. Immediately thereafter the vessel is pressed, mouth down, on the skin. As the glass cools, the air inside contracts, and a partial vacuum is formed. The result is, that the skin is drawn up inside the glass like a mound. This, of course, draws a quantity of blood to the spot.

**Wet Cupping.**—In *wet cupping*, the skin is scarified by means of an instrument furnished with a set of lances, which are suddenly set free by a trigger. Then the cupping glasses are applied, and blood is abstracted.

An ordinary tumbler may be used as a cupping glass.

**Treatment during Desquamation.**—During “desquamation” the patient should be kept particularly warm, and the skin ought to be rubbed daily with camphorated oil. Of course all scarlet fever cases must have good flannels.

**Treatment of enlarged Glands.**—If the glands of the neck enlarge (a frequent occurrence in scarlet fever), they may be rubbed with hot camphorated oil, and covered with flannel, also painted with iodine. If they go on to suppuration, they should be poulticed till ready for “lancing.”

**Treatment of Sore Ears.**—If the ears give trouble, a small blister should be put behind the affected organ at once. If discharge occurs, syringing with lukewarm water, strict cleanliness, and the administration of cod-liver oil and syrup of iodide of iron, may be ordered.

**Treatment of Discharge.**—Discharge from privates of female children sometimes occurs in scarlet fever. It may require the use of astringent lotions, tonics, and cod-liver oil.

**Treatment of Rheumatism.**—Rheumatism, following scarlet fever, may be treated by sponging the affected joints with laudanum, and wrapping in flannel. Dover's powder, salicine, and other medicines, may be prescribed by the doctor. The bowels should be regulated.

## NOTE A.

### OTHER FEVERS.

THE treatment indicated for typhus, enteric, and scarlet fever would, it is believed, with some modifications and additions, be applicable to most fevers.

Three other fevers may be briefly alluded to in this place.

**Relapsing Fever.**—Relapsing, or famine, or seven-day fever, sometimes prevails in this country. It is infectious. In addition to the usual symptoms of fever there is severe pain across the stomach, and frequently jaundice. But the most marked peculiarity about the disease is the “relapse.” The patient has got suddenly well at the end of seven days’ illness. He seems all right, but at the end of other seven days he is taken suddenly ill again. More than one relapse may occur. The patient is severely punished, but the disease has a low mortality; in

this respect presenting a marked contrast to typhus, with which it has in the past been sometimes confounded.

One great point in the treatment of this malady is to guard the patient against imprudence of all kinds, bearing in mind the likelihood of relapse.

**Intermittent Fever.**—Ague or intermittent fever prevails in marshy and malarious regions. It is not infectious. The cause of the disease clings to certain localities.

• In this disorder there are three stages—the cold, the hot, and the sweating.

In the first there are terribly violent shiverings, with chattering of the teeth and great feeling of cold.

In the second, burning heat is experienced.

In the third, profuse perspirations.

Warm blankets and bottles, and hot drinks, may be used in the cold stage; cold sponging and cold drink in the hot stage; and dry rubbing and change of flannels in the sweating stage.

Patient is relieved, but very weak, when the attack is over.

The attack returns again and again at regular

intervals; in some cases every day, in others, every second or third day. Quinine is the drug for ague.

The patient should, if possible, be removed from the malarious district. If that cannot be done, he should avoid being out at night, and he ought to sleep in an upper flat. Everything that tends to improve patient's strength and general health will be very useful.

**Yellow Fever**, "Black Vomit," or "Yellow Jack," is a disease of tropical regions, but it is occasionally imported into more temperate climes by shipping.

The disease is carried by, and seems to cling to, shipping.

The patient has severe headache and prostration. The skin becomes yellow, and if the *black vomit* sets in, the patient's doom may be considered as sealed. The disease usually runs a short course, and the mortality is high. Careful nursing seems to be the best treatment. In convalescence great prudence must be observed with regard to diet, etc.

## NOTE B.

### ON DISINFECTION.

**Disinfection.**—Everything that comes from a person suffering from infectious disease should be disinfected.

**Of Excreta.**—The motions and urine should be thoroughly treated with disinfectant before being put away. The commode pan should contain disinfectant before it is used; and after use more disinfectant should be added.

Among the disinfectants which may be employed are sulphate of iron (green vitriol), chloride of lime, carbolic acid, Condyl's fluid, "cupralum."

**Of Soiled Linen.**—Soiled linen should be put immediately into water containing carbolic acid or a little chloride of lime.

It should then be boiled, washed with soap and water, and afterwards well exposed to the fresh air.

**Of Woollen Articles.**—Woollen articles, or such



as cannot be washed without serious injury, must be thoroughly fumigated with sulphur vapour. This is done by hanging the articles in a closet or chamber where the outlets are carefully closed, and introducing an iron pot containing live coal and roll sulphur. The chamber must then be kept closed for some time, so that the fumes may take proper effect.

The high dry heat of a Ransome stove is a valuable mode of destroying infection.

**Of Beds.**—Beds should be ripped up and their contents either very thoroughly disinfected or burned. The “ticks” should be steeped in disinfecting solution, boiled, washed, and exposed to fresh air.

**Of Furniture.**—Furniture may be disinfected by thorough washing with carbolic soap and hot water.

**Of the Sick-Chamber.**—The ward or sick-chamber may be disinfected by scrubbing the floor with carbolic soap and hot water, whitewashing the ceiling, and giving the walls a fresh coat of white-wash, paper, or paint.

Most important of all, the windows and doors should be left open so that the fresh air may have free play.



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**Of Books, Toys, etc.**—Books, toys, etc., should be disinfected, or, better still, burned.

**Value of Water and Fresh Air.**—It should be borne in mind that water and fresh air are Nature's great disinfecting agents.

**Importance of Disinfection.**—Scrupulous and thorough disinfection is one of the most important duties connected with attendance on infectious diseases. A high moral responsibility attaches to it, for it is by this means that the spread of these maladies can be prevented, or at least restrained.

Careful attention to treatment is a duty which the nurse owes to her patients; conscientious disinfection is a duty which she owes to society at large.

## EXPLANATION OF TERMS USED.

<i>Abdomen</i>	. Belly.
<i>Abortion</i>	. Miscarriage at early stage.
<i>Albumen</i>	. Same substance as white of egg.
<i>Albuminuria</i>	Albumen in the urine.
<i>Alcohol</i>	. . The spirit in wine, whisky, etc.
<i>Catheter</i>	. . A tube for removing urine from bladder.
<i>Clinical</i>	. . For use at bed-side ; for example, "clinical " thermometer.
<i>Constipation</i>	. Costive state of the bowels.
<i>Convalescence</i>	Return to health.
<i>Convulsions</i>	. Fits.
<i>Desquamation</i>	Skin coming off.
<i>Disinfectant</i>	. Substance used with object of destroying infection.
<i>Diarrhœa</i>	. Looseness of the bowels.
<i>Enema</i>	. . Injection into the bowel.
<i>Fomentation</i>	Cloth wrung out of hot water.
<i>Hæmorrhage</i>	Bleeding.
<i>Inventory</i>	. List of articles.
<i>Menstruation</i>	" Monthly change."
<i>Miscarriage</i>	. Premature birth.
<i>Pregnancy</i>	. Being in the " family way."
<i>Thermometer</i>	Instrument for ascertaining degree of heat.
<i>Tympanitis</i>	. Abdomen like a drum.
<i>Temperature</i>	Degree of heat.
<i>Ulcers</i>	. . Sores.

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